

**REMARKS**

Claim 1 has been amended to delete  $\text{CHCOOH}$  and  $\text{C}(\text{COOH})_2$  from the description of group A. In addition, the term "isosteres of OH" has been deleted from the definition of  $\text{R}_3\text{-R}_6$ . Further, in view of the amendment relating to A, the proviso relating to A has been removed as it is now unnecessary. In addition, provisos (iii) and (iv) have been added to further limit the presently claimed invention. Claim 2 has been canceled. Claim 5 has been amended to make it dependent upon claim 1 rather than claim 2, which has been canceled. Claim 38 has been amended to further polish the claim language. New claims 56-69 have been added and are directed to embodiments of the invention. New claim 58 incorporates the subject matter of claims 14-19, which are indicated allowable if rewritten in independent form. No new matter has been added by way of these amendments.

*The Office Action*

The Office Action sets forth the following grounds for rejection: Claims 1-3, 5-13, 28, and 37-40 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Teraji et al. (USP 4,585,762); Claims 1, 2, 5-8, 10, 20, 21, 23-25, and 27 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Kokusho et al. (USP 4,783,402); Claims 1-3 and 5 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Vizitiu et al. (*J. Molecular Recognition* 1996, 9(2), 197-209); Claims 1, 2, 5-8, 10, 20, 21, 23-25, and 27 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Ryan et al. (*J. Med. Chem.* 1996, 39(22), 4366-4376); Claims 1-13, 23, 24, 27, 28, and 37-40 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Qiao et al. (*J. Med. Chem.* 1998, 41(18), 3303-3306); Claims 1-3, 5-13, 22, 23, 28, 34, 35, and 37-40 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Hu et al. (*Tetrahedron Lett.* 2000, 41(39), 7415-7416); and Claims 1 and 38-52 are rejected under 35 U.S.C. § 112, first paragraph, for an alleged non-enablement.

Claims 14-19, 26, 29-33, 36, and 53-55 are objected to as being dependent upon a rejected base claim. The Office indicates that these claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*The Examiner Interview*

Applicants wish to thank Examiner Jason Nolan, Ph.D. for the courtesies extended to Xavier Pillai, one of applicants' attorneys, during the telephone conference held on April 26, 2007 and May 14, 2007. During the interview of April 26, the Examiner provided the locations in the cited references where anticipatory material is allegedly found. On May 14, 2007, the Examiner indicated that he would favorably consider claim language including additional provisos that further limit the claimed invention, for which applicants are thankful.

*Discussion of Rejections*

1. Anticipation Rejections

Claims 1-3, 5-13, 28, and 37-40 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Teraji et al. The Office contends that Teraji et al. discloses compound RN 112924-43-3. Applicants respectfully submit that the compound having five hydroxyl groups on the cyclohexyl ring, RN 112924-43-3, has been excluded by the proviso language which states that "R<sub>2</sub>, R<sub>3</sub>, R<sub>5</sub>, and R<sub>6</sub> are not simultaneously OH." When these four groups cannot be all OH, naturally, the compound having five OH groups has been excluded. Accordingly, this rejection should be withdrawn.

Claims 1, 2, 5-8, 10, 20, 21, 23-25, and 27 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Kokusho et al. The rejection of the above claims has been rendered moot in view of the claim amendment. The proviso which states that "R<sub>2</sub>, R<sub>3</sub>, R<sub>5</sub>, and R<sub>6</sub> are not simultaneously OH or H" excludes compound RN 94456-73-2. In view of the foregoing, the rejection should be withdrawn.

Claims 1-3 and 5 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Vizitiu et al. Applicants respectfully disagree. The compound RN 182144-18-9 of Vizitiu et al. is not covered by the present claims; note the definition of R<sub>1</sub> and R<sub>7</sub> does not encompass the alkylarylalkyl and alkylarylalkoxyalkyl groups of RN 182144-18-9. Accordingly, the rejection is erroneous. Moreover, applicants have amended the claims to recite that R<sub>2</sub>, R<sub>3</sub>,

R<sub>5</sub>, and R<sub>6</sub> are not simultaneously OH, thereby excluding compound RN 182144-14-5. In view of the foregoing, the rejection should be withdrawn.

Claims 1, 2, 5-8, 10, 20, 21, 23-25, and 27 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Ryan et al. Applicants have rendered this rejection moot in view of the proviso language that states that R<sub>2</sub>, R<sub>3</sub>, R<sub>5</sub>, and R<sub>6</sub> are not simultaneously OH. In view of the foregoing, the rejection should be withdrawn.

Claims 1-13, 23, 24, 27, 28, and 37-40 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Qiao et al. Applicants have amended the claims. The proviso that states R<sub>2</sub>, R<sub>3</sub>, R<sub>5</sub>, and R<sub>6</sub> are not simultaneously OH excludes the compounds of Qiao et al. Accordingly, the rejection should be removed.

Claims 1-3, 5-13, 22, 23, 28, 34, 35, and 37-40 are rejected under 35 U.S.C. § 102(b), as allegedly anticipated by Hu et al. Applicants have amended the claims. The proviso that states R<sub>2</sub>, R<sub>3</sub>, R<sub>5</sub>, and R<sub>6</sub> are not simultaneously OH excludes compound RN 253440-95-8 of Qiao et al. Further, the proviso that states R<sub>5</sub> and R<sub>4</sub> are not simultaneously H excludes compound RN 310872-32-3. In view of the foregoing, the rejection should be withdrawn.

## 2. Enablement Rejections

Claim 1 has been rejected under 35 U.S.C. § 112, first paragraph, for an alleged non-enablement. The Office admits that the claim is enabled for A = P(O)OH; however, the Office contends that the claim is not enabled for compounds wherein A = CHCOOH and C(COOH)<sub>2</sub>. The Office also contends that the claim is not enabled for compounds wherein R<sub>2</sub>-R<sub>6</sub> are isosteres of OH. Although applicants disagree with the rejection, applicants have amended claim 1, as discussed, to expedite the prosecution of the application. Accordingly, the non-enablement rejection of claim 1 should be removed.

Claims 38-52 are also rejected under 35 U.S.C. § 112, first paragraph. The Office admits that the specification is enabling for compounds and compositions that inhibit Akt activation and phosphorylation of several downstream substrates of Akt in tumor cells. However, the Office contends that the specification does not reasonably provide enablement for preventing or treating a disease characterized by the activation of Akt. Although applicants disagree with the rejection, applicants have amended claim 38. The present claim

is fully enabled by the specification. Claims 39-52 have been canceled. Accordingly, the rejection should be removed.

Moreover, as set forth in the Rule 132 Declaration, compounds of the claimed invention, SH-23 and SH-16, inhibit tumor growth in vivo. Accordingly, new claims 56-57, 67, and 69 are fully enabled and should not be rejected.

*Conclusion*

A favorable decision is solicited. Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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Date: May 15, 2007